

New York State Department of Transportation

Yellow Flag NB22CTW016

By: Rehan Afridi

Flag Date: April 13, 2022

Superseding Information:

This flag supersedes: YF NB2122W033

Structure Information

BIN: 1065318

Feature Carried: 278I278IX2M23027

Feature Crossed: 6TH AVENUE

Orientation: 8 - NORTHWEST

Region: 11 - NEW YORK CITY

County: KINGS

Political Unit: City of NEW YORK

Approximate Year Built: 1962

Posted Load Matches Inventory : Yes

Bridge Load Posting (Tons) : Not Posted for Load

Primary Owner: New York State Department of Transportation

Primary Maintenance Responsibility: 12 - State - Subcontracted to another Party

Typical or Main Span Type: 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp

Number of Spans: 322

Verbal Notification Information

Person Notified: Heinz Joachim, P.E.

Date: April 13, 2022 10:00:00 AM

Of: NYSDOT Region 11

Signature Information

Signature: Rehan Afridi, P.E. 075185

Date: April 25, 2022

Reviewed By: Robert Kemp

Date: April 28, 2022

Attachments: 8

Flagged Elements

Parent Element	Element	Total Quantity	Unit
Span Number : 227			
	107 - Steel Open Girder/Beam	1093	ft
	PR831 - Steel Beam End	46	each

Flagged Condition Description

This Yellow Flag No. NB22CTW016 supersedes previously issued Yellow Flag No. NB2122W033.

Location: Span 227, Girder G21 at Pier 226.

Description: The right clip/connection angle of Girder G21 connection to the pier cap at Pier 226 exhibits a 5" long vertical corrosion crack x 1/2" wide (no change since previous inspection) at the lower fillet section. The upper fillet section has a 5-1/2" long vertical corrosion crack x 1/8" wide (no change since previous inspection). In addition, the vertical stiffener/connection angle is heavily corroded and has a 3" diameter hole at the base and a 3" long horizontal crack (previously 2-1/2" long) 9" above the bottom flange of the pier cap. The areas adjacent to the crack and corrosion hole have up to 75% section loss with two 1/8" dia. holes.

Notes:

1. The affected member, Girder G21 is a load path redundant steel girder consisting of a web depth of 21.30" inches and thickness of 0.608 inches and is located under the deck in the roadway, approximately 12" off the edge of curb line/safety walk.
2. The remaining section of the right clip/connection angle has heavy corrosion and up to 1/2" pack rust between the connection at the pier cap.
3. The adjacent Girder (left) G20, is 3'-03" on center (and does not have repair plates at the girder end as previously noted) but is in good condition.
4. The adjacent Stringer (right) S2, approximately 2'-0" on center, acts as a support for the railing and curb area above and has knife edge corrosion along the left side bottom flange angle with 100% section loss for 4.5" L x 1/2" W. An additional 24" L x 2" W section of the left side bottom flange angle exhibits corrosion with up to 1/8" section loss.
5. A double lane closure on 3rd Avenue Eastbound with shadow vehicle and a 35' bucket truck is required to access the flagged location.

Flag Photographs

Photo Number: 1

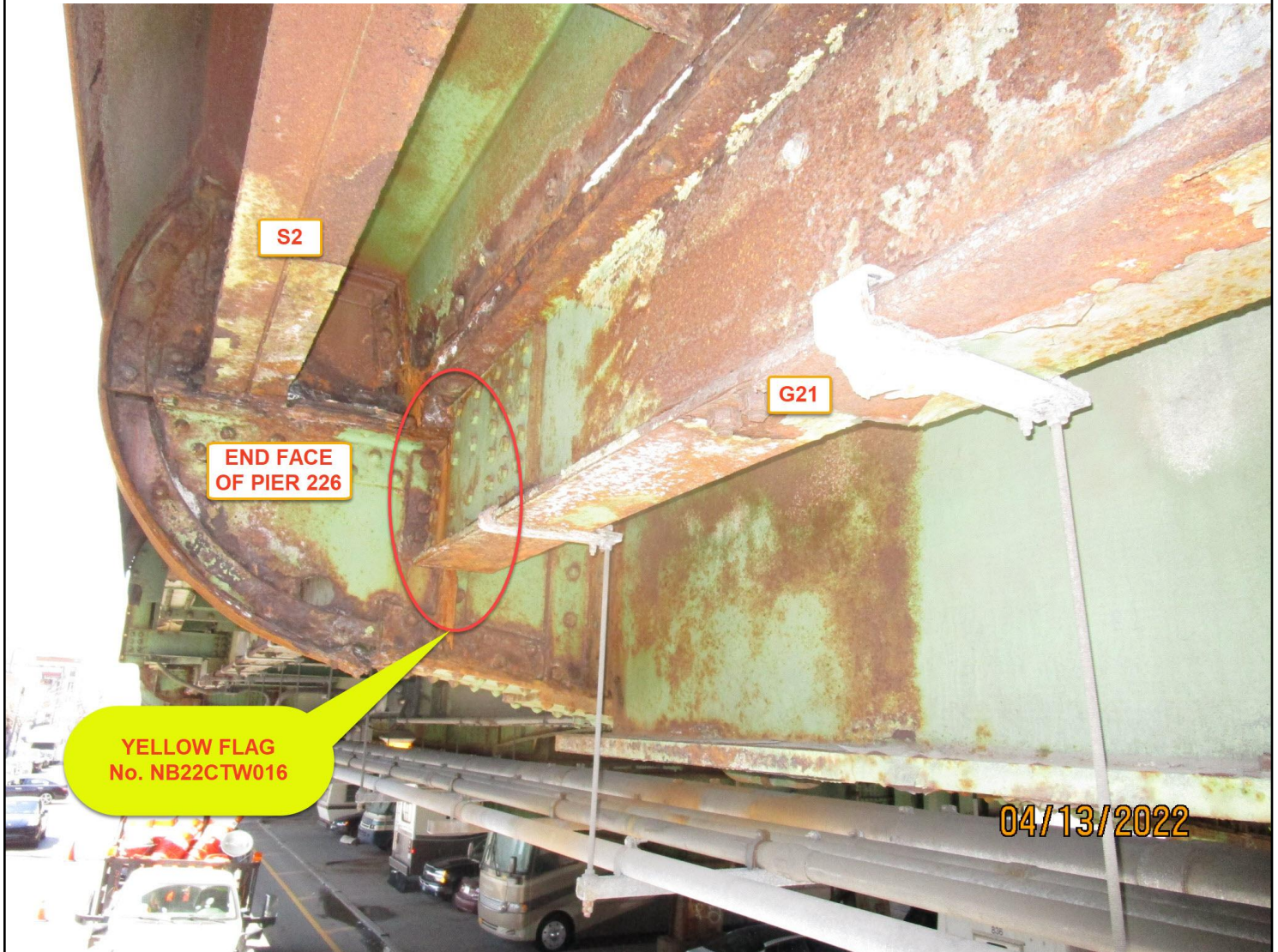
Photo Filename: Photo 1-RA 614_0584.jpg



Attachment Description: Span 227, Girder G21 at Pier 226 – General Framing at Flagged Location. Looking Begin.

Photo Number: 2

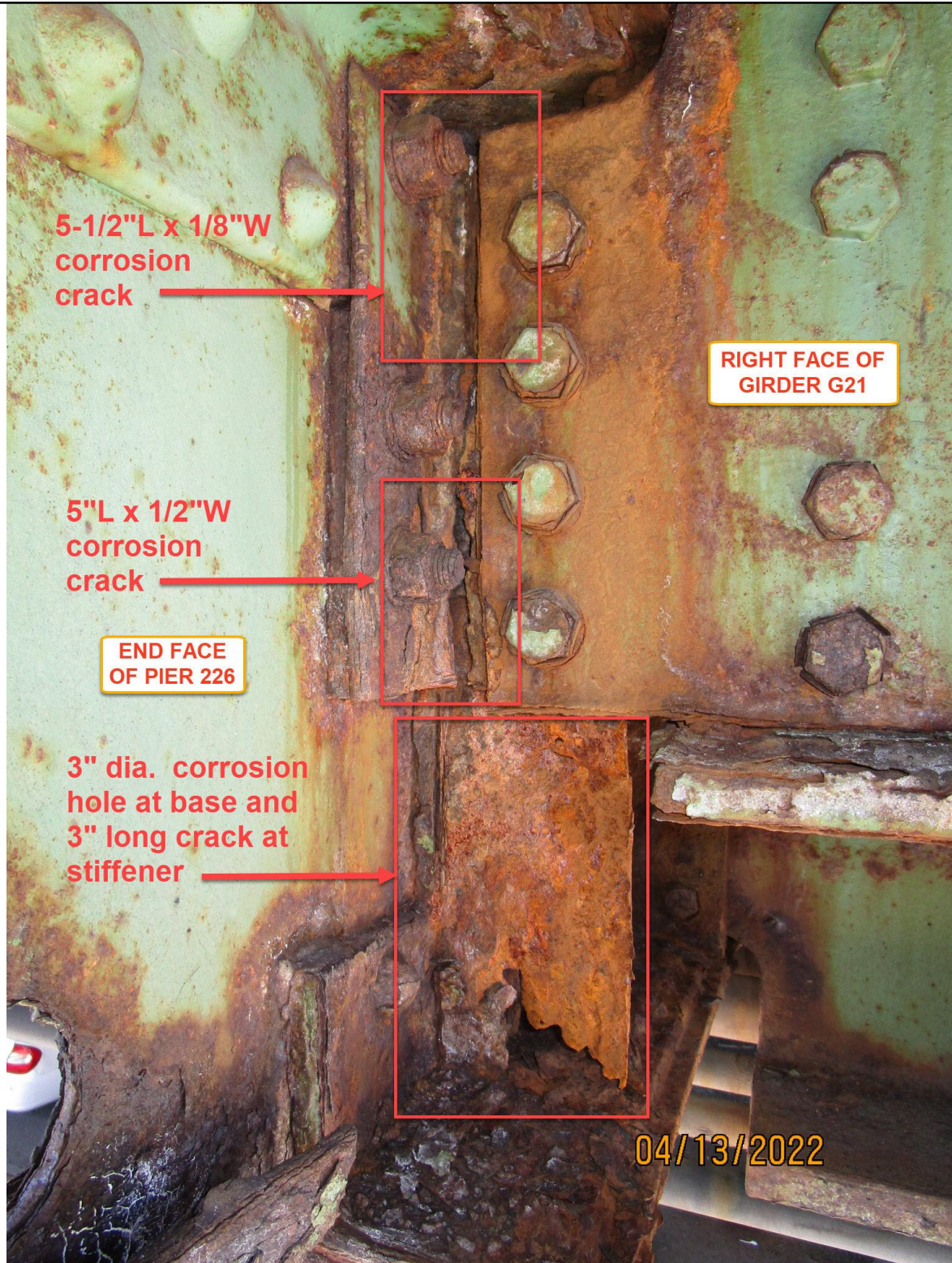
Photo Filename: Photo 2-RA 614_0585.jpg



Attachment Description: Span 227, Girder G21 at Pier 226 – General view of Flag Location. Looking Begin.

Photo Number: 3

Photo Filename: Photo 3-RA 614_0587.jpg



Attachment Description: Span 227, Girder G21 at Pier 226 – General close-up view of the flagged condition. Looking Left.

Photo Number: 4

Photo Filename: Photo 4-RA 614_0589.jpg



Attachment Description: Span 227, Girder G21 at Pier 226 – Close up view of the lower section of connection angle. 5”L x 1/2”W corrosion crack. Looking Left.

Photo Number: 5

Photo Filename: Photo 5-RA 614_0590.jpg



Attachment Description: Span 227, Girder G21 at Pier 226 – Close-up view of the upper section of connection angle. 5'-1/2" L x 1/8" W corrosion crack. Looking Left.

Photo Number: 6

Photo Filename: Photo 6-RA 614_0592.jpg



Attachment Description: Span 227, Girder G21 at Pier 226 – Close-up view of the stiffener connection angle. 3" diameter corrosion hole at base and 3" long horizontal crack approx. 9" above bottom flange of pier cap. Looking Left.

Photo Number: 7

Photo Filename: 22_Girder Detail Sketch.jpg

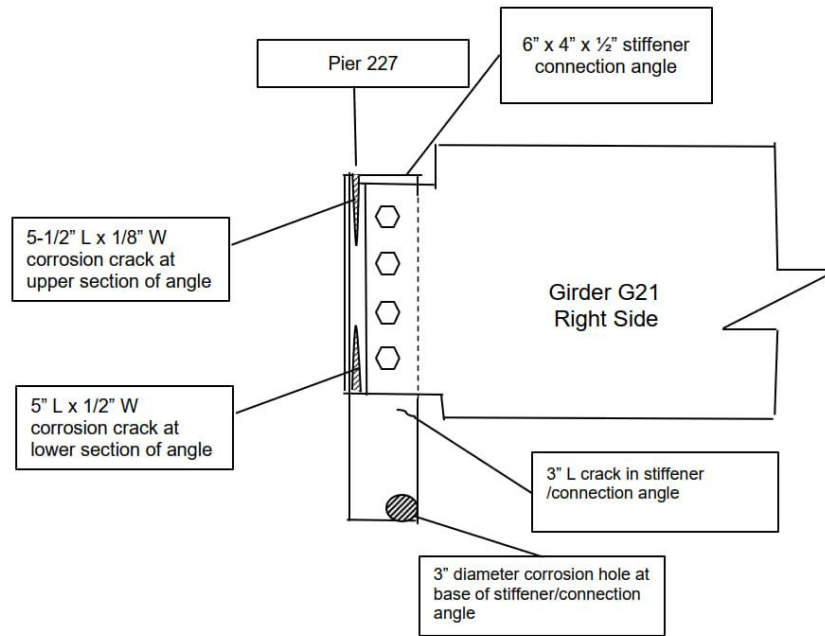
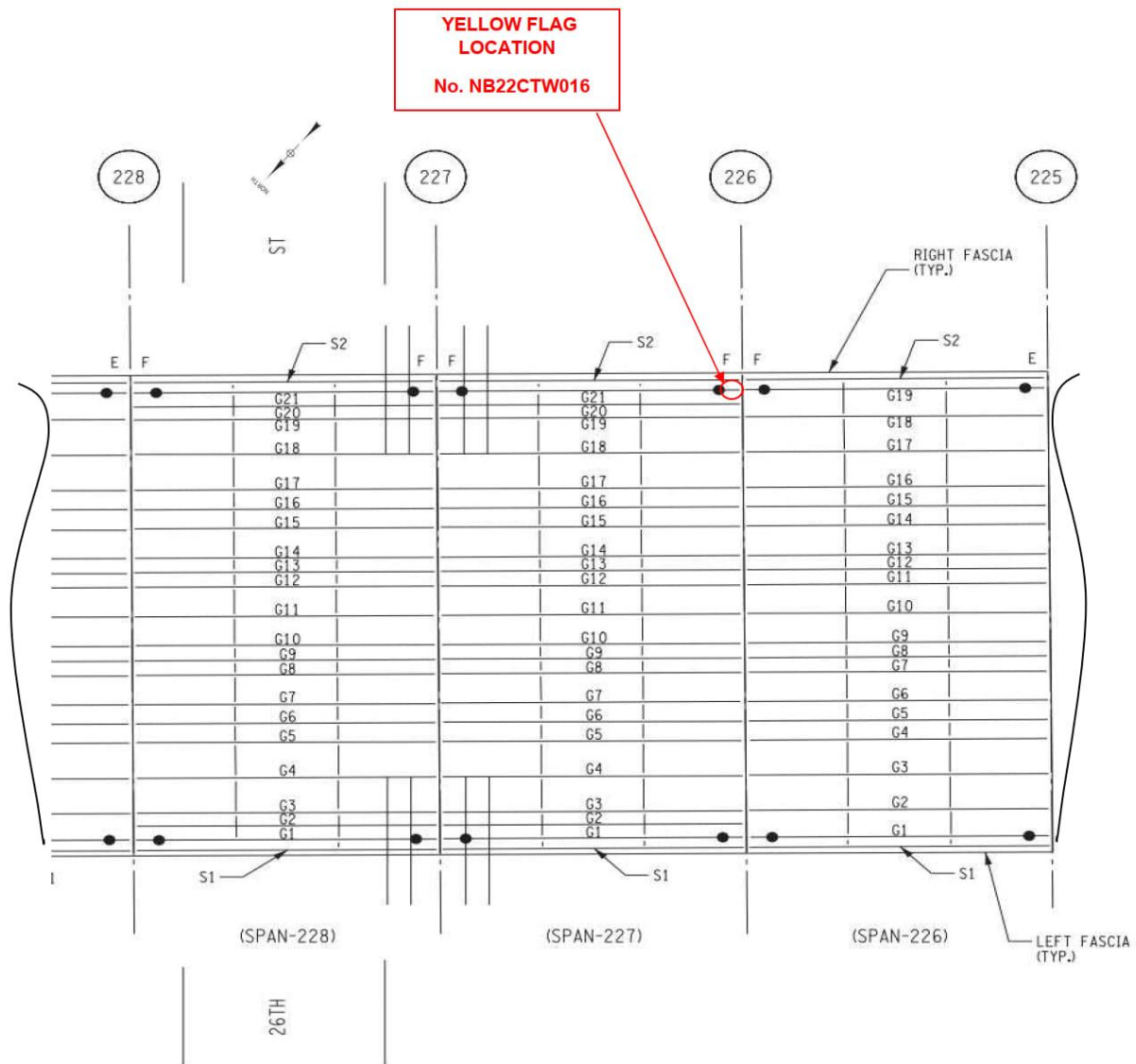
Span 227, Girder G21 at Pier 226Right side of Girder G21 at PIER 226 – Looking Left**Attachment Description: SN 227 G21 at Pier 226 Sketch**

Photo Number: 8

Photo Filename: Framing Plan.jpg



Attachment Description: SN 227 G21 at Pier 226 Framing Plan